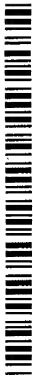


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DOCUMENT CLASSIFICATION BARCODE SHEET



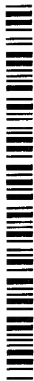
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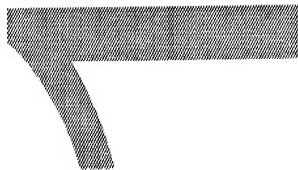
As-Perfected Follow-on Papers

Level -1
Version 1.1

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Transmittal



Level - 2
Version 1.1



VOS-30

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Applicants : Leszek Wojnowski et al.

Application No. : 10/070,587

Confirmation No. : Not yet assigned

Filed : March 8, 2002

For : POLYMORPHISMS IN THE HUMAN CYP3A4
AND CYP3A7 GENES AND THEIR USE IN
DIAGNOSTIC AND THERAPEUTIC
APPLICATIONS

Group Art Unit : Not Yet Assigned

Examiner : Not yet assigned

New York, New York
April 8, 2002

Hon. Commissioner for Patents
P.O. Box 2327
Arlington, Virginia 22202
Attention: BOX PGPUB DRAWINGS

TRANSMITTAL LETTER

Sir:

Transmitted herewith: [X] Petition Under 37 C.F.R.
§ 1.182 for Entry of the Drawings; [X] 9 Sheets of Formal
Drawings; [X] a check for \$130.00; to be filed in the above-
identified patent application.

Express Mail Label
No. EV 045437017 US

The Director is hereby authorized to charge any additional fee due, or credit any overpayment, in connection with this Petition, to Deposit Account No. 06-1075. A duplicate copy of this letter is enclosed herewith.

Respectfully submitted,

Stephen J. Payrand

James F. Haley, Jr. (Reg. No. 27,794)
Jane T. Gunnison (Reg. No. 38,479)
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VOS-30

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Applicants : Leszek Wojnowski et al.
Application No. : 10/070,587
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APPLICATIONS
Group Art Unit : Not Yet Assigned
Examiner : Not yet assigned

04/11/2002 MGEEREN1-00000048 10070587
01 FC:632 130.00 OP

New York, New York
April 8, 2002

Hon. Commissioner for Patents
P.O. Box 2327
Arlington, Virginia 22202

Attention: BOX PG PUB DRAWINGS

04/11/2002 MGEEREN1-00000048 10070587-
01 FC:632 PETITION UNDER 37 C.F.R. § 1.182
FOR ENTRY OF THE DRAWINGS

130.00 OP

Sir:

Pursuant to 37 C.F.R. § 1.182, applicants hereby
petition for entry of the enclosed drawings (9 sheets) in the
publication of this patent application. A check in the amount
of \$130.00, in payment of the fee set forth in 37 C.F.R. §
1.17(h), is enclosed herewith.

Express Mail Label
No. EV 045437017 US

The drawings submitted herewith are identical to the drawings submitted on March 8, 2002. This submission does not constitute new matter.

The Director is hereby authorized to charge any additional fee due, or credit any overpayment, in connection with this Petition, to Deposit Account No. 06-1075. A duplicate copy of this Petition is enclosed herewith.

Respectfully submitted,

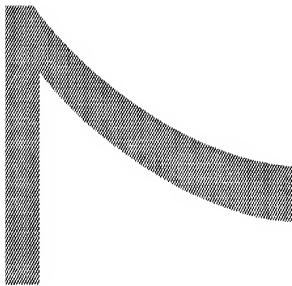
Shawn Marie Mayrand

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THE UNIVERSITY OF CHICAGO



Drawings



Level - 2
Version 1.1



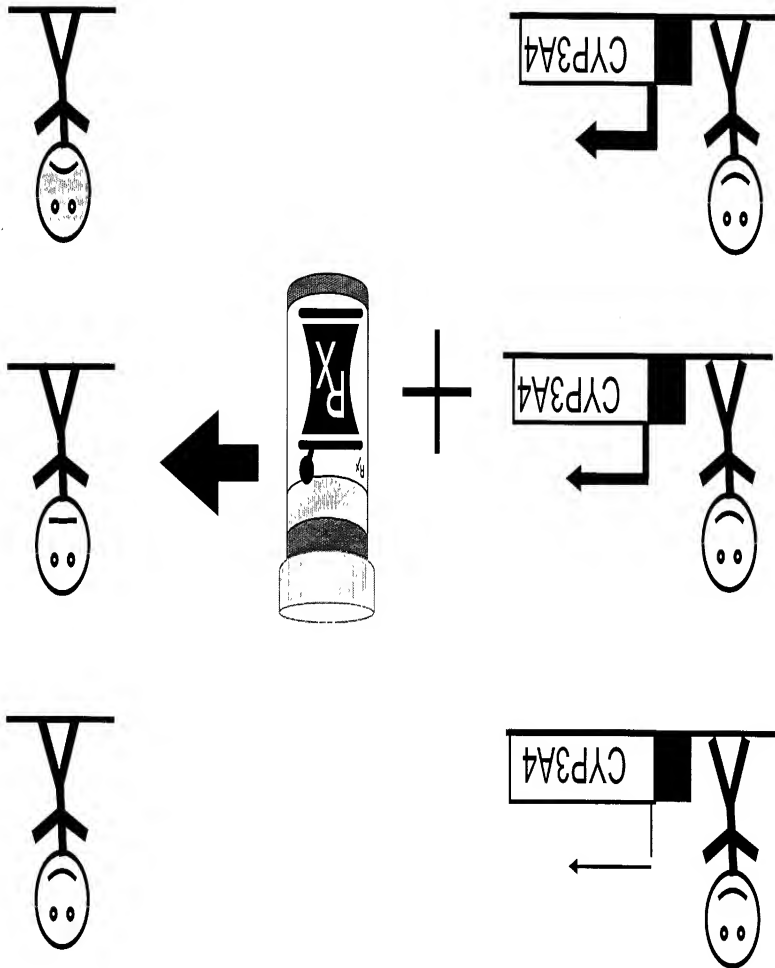


Fig. 1

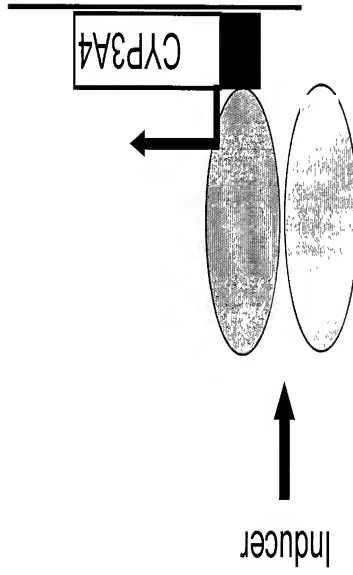
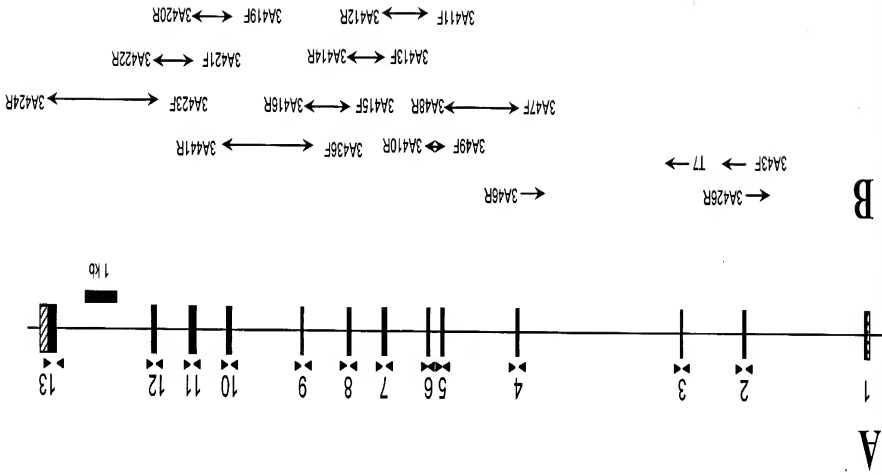


Fig. 2

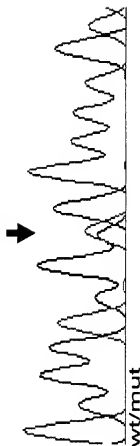
Fig. 3



CYP3A4 polymorphisms

Exon 3 (G6004A; Gly56Asp)

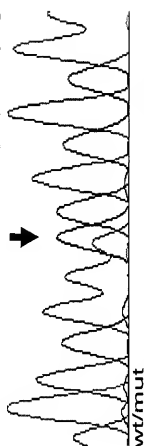
T C C C G G G A C T T T T G T



Oligonucleotide 3A450F (forwards)

Intron 7 (T→G)

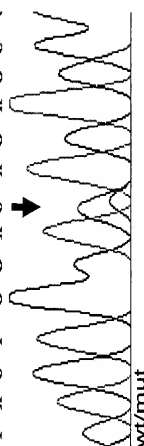
T A T C T T G C T C T C T T



Oligonucleotide 3A433F (forwards)

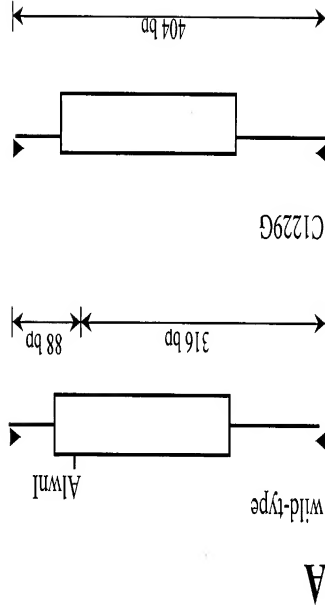
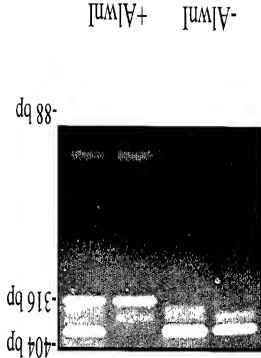
A CYP3A7 exon 11 polymorphism (C1229G; Thr409Arg)

T A C T G G A C A G A G C A



Oligonucleotide 3A742F (forwards)

Fig. 4



B

Fig. 5

CYP3A4

Exon 3 (g.6004G>A, G56D)

CCCTCAACTGCCAGCAAGTCIGATTTTCATTGGCTTCGACTGTITTTCAATCCCAATTAGAGGCAG
GGTTAAGTAACTAAAATAAATCAAAATATATTTTGTTCCTCCCAAGGAACTTTTGTATGT
TGACATGGAAATGCATAAAGATGAAAAAGTGTGGGGGTGAGATTTCTGGAACTTCATT
GGATAGACTTGTTTCTATGATGAGTTTACCCCACTGCACAGAGGACAGTCTCAGCCC

Exon 4 (Primer 3A4-52F and 3A4-37R)

AGCTCGCTTCTCTCGGGTTGGGCTCCAGCTGTAGAAATAAGGCTGTTGATGTTTTAA
TCAACTCTGTTTTTTCACACAGCTTTTATGATGGTCAACAGCCTGTGCTGCTGCTA
TCACAGATCCGTGACATGATCAAAACAGTGTAGTGAAGAAATGTTATTTCTGCTT
TCACAAACCGGAGGTTAAGCATTCATGTGTGAAATTAATAATACCTGATTGATTAA
ATTATATTTTAAATCTTATATATTCATAGACAGTTGCCCTAAAAAATGTCCAGG
AAGGTTCCACGTCCTTC

Exon 5

CTACAAACCATGGAGACCTCCACAACCTGATGTAGGACAAAAATGTTTCTGCTTTGAA
CTCTAGCCCTTTTGGTCCAGTGGGATTTATGAAAAGTGCCATCTCTATAGCTGAG
GATGAAGAAATGGAAAGATTACGATTCGTCTCTCCAACTTCACCCAGTGG
AAAACCTCAAGGAGGTATGAATAACATGAGTTTATAAGAAACTTAAAGAATG
AATCTGGTGGGACAGGTA

Exon 7 (g.15753T>G)

GTCTGTCTTGACATGGACATGIGGCTTTCCTGATGCACGCATAGAGGAAGGATGG
TAAAGAAGTGCTGATTTTAAATTTCCACATCTTTCACACTCAGCGTCTTTGGGG
CTCACAGCATGGATGTGATCACTAGCACATCTTTGGAGTGAACATCGACTCT
CTCAACAATCCACAAGACCCCTTTGTGGAACACCAAGAGCTTTTAAGATT
TGATTTTTTGGATCCATCTTCTCTCAATAAGTATGTGGACTACTATTTCCCTTT
ATTTATCTTTGGCTCTCTTAAATAACAGTTAGTGTGATATAAATCACCATGT
AATTCATCCACTTAAATATACAGTTTCAGTGTGTTGTACATTTGAAGATATGT
GTGACCAATCATC

Exon 9

GGAGATCAAGGACCACGCTTGIGATTTTACTTCTGACTTCAGGAGCCACTTTCTG
TCAGTGAAATTTCTCTTTTGGTCTTAGCACCGAGTGGATTTCTTCTCAGCTGATG
ATTGACTCTCAGATCTCAAAAGAACTAGTCCCAAGGCTAAACAGAGTGT
TTCTGAGGGCTACTTGTGGGCACTCAGAGGAAGGCCCTTGTCTGAAAATGTG
CAGGAAGTATTCAGGATGATGAG

CYP3A7

Exon 11 (C1229G Thr409Arg polymorphism)

CCAGTATGAGTTGTTCTCTGGAACTCTAACAGTTCAACAGTACTACATGGACTG
AGTTAAAAGTTAATCAAAATCTCAATTTATCCAAATCTGTTCTTCTTTTCAGG
CACCACCCACCTATGATACTGTGCTACAGTTGGAGTATCTTGACATGGTGCTG

Fig. 6

AATGAACACATCAGATTATCCCATGTTGCTATGAGACTTGAGAGGGTCTGCAA
AAAGATGTTGAATCAATGGATGTTTATTCCTCCAAAGGGTGTGATGA
TTCCAAAGCTATGTTCTTCATCATGACCCAAAGTACTGGAC→GAGAGCCTGAGA
AGTCTCCCTGGAAGGTAGGAGGCCCTGGGAAGGGAGCCCTCCCTGAACC
AGCTCGGTTCAAGCATATTCTGCCCT

CYP3A4

Exon 4 (Primers 3A4-52F and 3A4-100R)

AGTCTGCGCTTCCCTGGTTGGCTCCAGCTGTAGATAAGGCTGTTGATGTTTAA
TCAACTCTGTTTTTTTCCACACAGCTTTTATGATGGTCAACAGCCGTGCTGGCTA
TCACAGATCCCTGAGATGATCAAAACAGCTGTAGTGAAGAAATGTTATTTCTCT
TCACAAACCGGAGGTAAAGCAATCATGTGTTGAAATTAATAACTGATTGATTAA
ATTATATTTTGAATCTTATATTCATAGACAGTTGCCTAAAAAATGTCCAGG
AAGGTTCCAGCTCCACTTCATCTGTCGCC

Exon 5 (g.13908G>A, R130Q)

CTACAACTGAGGAGCCCTCCAACTGATGTAGGACAAAAATGTTTCTGCTTTGAA
CTCAGCCCTTTTGGTCCAGTGGGATTTATGAAAGTGCCATCTCTATAGCTGAG
GATGAAGAAATGGAAGAGATTACG→AATCATTTGCTGCTCCAACTTCACCAGT
GGAAAACTCAAGGAGGATGAATAATAACATGAGTTTTAATAAGAACTTTAAAGA
ATGAATCTGGTGGGACAGGTA

Exon 6 (g.14292G>A, V170I; g.14304G>C, D174H; g.14323C>T; g.14329G>T; g.14357T>G)

CCCTTTCCAAAGGGTAGTCCACTGAAATTTGAGCTGCCATAAAATGGTCTTTTATC
TTTATGTACAGAAACACATCACAAATTTCAATTAATAATGTCACTTACTGCTCCA
TGCTGGGAAAGCCATGCTCTCTGGACTAGAGTCTGCACATTTAACTATGGG
TGGTGTGTTTGTCTTAGATGGTCCCTATCATTTGCCAGTATGGAGATGT
GTTGGTGAGAAATCTGAGGGCGGAAAGCAGACAGGCAAGCCCTG→ATCACC
TTGAAAG→CAGTAAGTAGAAAGCCGACGC→TATGGGG→TTTCTGAGCTGTCTAT
GAACTCCACGCT→GGCCTGCCCATGGAGCTGATATCTCTGCTGTTGGTTAT
TCCAGTGACCCAGC

Exon10 (g.20230G>A)

CCGAGTGACTCTCTGAATTGCTTTTCTATTCTTTTCCCTTAGGGATTTGAGGGCT
TCACATGATTTCTTCTTCACTTAACTGTGATGCCCTACATGATCTGATTTACCT
AAAATGCTTTCCCTCTCTTCAAGCTCTGTCCGATCTGAGCTCGTGCCCCAAT
CAATTATCTTATTTTGTCTGGCTATGAACCACCGACAGTGTTCTCTCCTTCAT
TATGTATGAACCTGGCCACTCACCTGATGTCAGTCCAGCAAC TGCAGGAGGAA
ATTGATGCAGTTTACCCAAATAAGGTGAGTGGATGG→ATACATGGAGAGGAG
GGAGGAGGTGAAACCTTAGCAAAAATGCCCTCTCACCACTTCCAGGAGAAATTT
TTATAAAAGCATAATCACTGATTTCTTTCACCTGACTCTATGTAGGAAGGCTCTG

Fig. 6 cont.

Exon 11 (g.21867C>T, T363M; g.21868G>A; g.21896C>T, L373F; g.22026C>T, P416L; g.22041C>T);

CAGTATGATTAGTCTCTGGAGCTCCTAATACTTCACTTACTGACTGCATGGACTGA
 GTTAAAGTTAAATCAAAATCTCAATATATCCAAATCTGTTCTCTTTCCAGGC
 ACCACCCATGATGCTGCTACAGATGAGATGAGTCTTGACATGGTGGTGA
 ATGAAAC→IG→ACTCAGATTATTCCTCAATGCTATGAGAC→TTTGAGAGGGT
 CTGCAAAAAGATGTTGAGATCAATGGGATGTTCACTCCAAAGGGGTGGTGTG
 TGATGATCCAAAGCTATGCTCTTCACCGTGACCAAGTACGGACAGAGCGCT
 GAGAAAGTTCTCCCG→ITGAAAGGTACAAAGG→ICCTGGGAAGGGAGCCCTC
 CCTGAACAGCCCTGGTTCAAGCATATCTGCCCTCTCTTAATCTACAGGACAGTCA
 TGTGGTTGTATAATTATTTGCTTGATTTTATTTATTTAGAGATTTTATCATCA
 AATTGATTATGTCACACTTTACAAACCATAGACTAGAAAAAGAAAACTACAGTC
 ATCCCAATCCAAACCTTACGATGAAGGTCAATGATTATG

Exon 12 (g.23081C>T)

CCTGGTACTACTAGTGGAGGG*GTGGCCCCCTAAGTAAAGAAACCCCTAACATGTAA
 CTCATTAGGGGTATTATGTCAATTAACTTTTTAAATCTACAAAC→IGTGGAACCA
 GATTCAGCAAGAAACAAGGACACATAGATCCTTACATACACACCCCTTT
 GGAAGTGGACCGAAATGCTATTGGCATGAGGTTGCTCTCATGAACATGAA
 ACTTGCTCTAATCAGAGTCCCTTCAGAACTCTCTCAAACTTGTAAAGAAAC
 ACAGGTTAGTCAATTTCTATAAAATATGTTGTTATTAATCTTTTAACTGA
 GTGCTCTGATTTTTTAAAGAAATATGCTTGTTTAACTTTTACTAATTTTGTCTC
 TGGGCCAAAGAAATCAATTAGGCCCACTGTG

this oligonucleotide used for genotyping differs from the genomic sequence at the positions shown in italics

Exon 13 (g.25925C>T; g.25958T>G)

GGAGTGTCTCCTCCTTGTGATGCTATACCTTCTACTTTTGTATTATGCTTC
 TCAATATGCTTGTTTAACTGTTGCAGATCCCCCTGAATTAAGCTTAGGAGAC
 TTCTTCAACGAGAAACCCGTTGTTCTAAAGTTGATGAGGATGGCACC
 →IGTAAGTGGAGCCTGAATTTTCTTAAGGACTTCTI→GGCTTTGCTCTCAAGAA
 ATCTGTGCTGAGAAACACAGAGACCTCAAAATTACTTTGTGAATAGAACTCTGAA
 ATGAAGATGGGCTTCAATCCA

Fig. 6 cont.

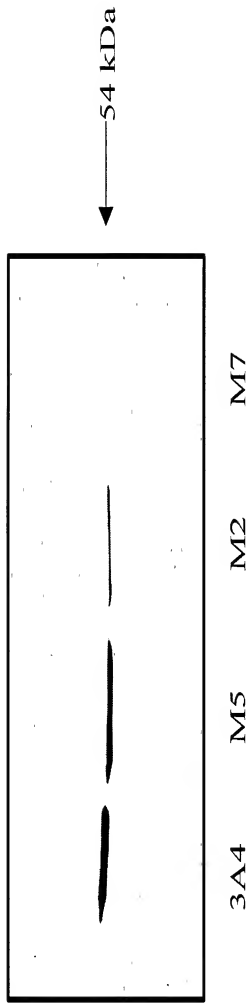


Fig. 7

[illegible]

Miscellaneous

Level - 2
Version 1.1
Updated - 8/01/01





UNITED STATES
PATENT AND
TRADEMARK OFFICE



Commissioner for Patents
Washington, DC 20231
www.uspto.gov

4/29/02

Fish and Neave
1251 Avenue of the Americas
New York NY 10020-1104

Dear Applicant:

The Box PGPub replacement drawings for application number 10/070,587 received on 4/8/02 by the U. S. Patent and Trademark Office will be included for patent publication.

Telephone inquiries should be directed to Customer Service, Office of Initial Patent Examination, at 703-308-1202.



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Signature of Reviewer, Office of Initial Patent Examination